

In re: Dube *et al.*  
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### REMARKS

Reexamination and reconsideration of this Application, withdrawal of the rejection, and formal notification of the allowance of all claims as now presented are earnestly solicited in light of the above amendments and remarks, which follow.

Claims 1-4 and 6-30 are pending in the application. Claims 10-12, 14, 25, and 26 stand allowed. Claims 1-4, 6-9, 13, and 15-24 stand rejected. Claims 1-2, 4, 9-10, 15 and 17 have been amended to clarify the invention. Specifically, Claim 1 has been amended to clarify that the mixture includes water. Claims 1 and 15 have been amended to recite that the reducing sugar is a pure reducing sugar, a high fructose corn syrup, or a phosphate-substituted reducing sugar. Claims 1, 10 and 15 have been amended to remove unnecessary reference to tobacco leaves or cut filler. Claim 2 has been amended to simplify claim language. Claims 4 and 17 have been amended to specify that the reducing sugar is a pure reducing sugar selected from the enumerated list. Claim 9 has been amended to use language consistent with amended Claim 1. Support for the claim amendments may be found throughout the specification, and particularly on pages 4-8 and in the original claims.

New Claims 27-30 have been added. New Claims 27-29 are dependent upon allowed Claim 10. New independent Claim 30 recites the presence of a high fructose corn syrup in the mixture. Support for the new claims may be found throughout the specification, and particularly on pages 4-8 and in the original claims. It is believed that the above claim amendments/additions add no new matter and place all claims in condition for allowance. As a result, entry of these amendments is respectfully requested.

Claims 1-4, 6-9, 13, and 23-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Anwar *et al.* (U.S. Patent No. 3,618,588) in view of Richards (U.S. Patent No. 5,454,874) and the Encyclopedia of Food Science Technology and Nutrition ("EFSTN"). Claims 15-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Anwar *et al.* (U.S. Patent No. 3,618,588) in view of the EFSTN. The Office Action states that Anwar discloses a process for manufacturing caramel color which comprises heating the juice from fruit, which contains levulose, in the presence of a catalyst, which may be employed in the amount of between 4 and about 20 percent, and which can be chosen from an alkali catalyst, such as sodium

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hydroxide, under temperatures preferably ranging from about 222-350° F (105-176° C).

Applicants respectfully traverse the above rejections.

Applicants respectfully submit that the claims, as amended, are directed to caramelization mixtures comprising a reducing sugar selected from a pure reducing sugar, high fructose corn syrup, or a phosphate-substituted reducing sugar. As clearly recognized by the Examiner based on allowance of Claim 10 and all claims dependent thereon, the Anwar reference only teaches the use of an unrefined fruit-based reducing sugar source; namely, fruit juice. Anwar teaches that a "high quality caramel color having high acid stability can be simply produced from the carbohydrate content of ordinary unrefined fruit and fruit juices" (see column 2, lines 8-11). Further, Anwar states the process of its invention employs carbohydrates that are in "natural, untreated fruit or the juice prepared from the fruit as the raw material" in its caramelization process (see column 2, lines 12-13).

Applicants respectfully submit that the carbohydrates taught for use in caramelization by Anwar do not encompass the reducing sugar as claimed in the present application as the carbohydrates taught by Anwar are not a pure reducing sugar, high-fructose corn syrup, or a phosphate-substituted reducing sugar. Instead, Anwar only teaches the use of fruit or fruit juice. In light of the foregoing, Applicants request reconsideration and withdrawal of the above-described rejections.

With regard to new Claims 27-30, Applicants note that Claims 27-29 should be allowable based upon dependence on an allowed independent claim. New Claim 30 should likewise be allowable because it recites the presence of high fructose corn syrup, which the Examiner has conceded is not taught or suggested by the art of record.

Accordingly, it is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that no new matter has been added by this amendment and that all pending claims are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned should the Examiner have any comments or suggestions in order to expedite examination of this case.

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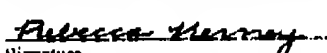

It is not believed that extensions of time or fees for net addition of claims are required, beyond those, which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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**Version with Markings to Show Changes Made:**

Please amend Claims 1-2, 4, 9, 10, 15, and 17 as follows:

1. (Three times amended) A method for improving the flavor and aroma characters of a smoking article, comprising:

providing an aqueous mixture consisting essentially of water, a reducing sugar and a hydroxide, wherein the reducing sugar is selected from the group consisting of a pure reducing sugar, high fructose corn syrup, and a phosphate-substituted reducing sugar;

subjecting said mixture to heat treatment for a time and under conditions sufficient to produce a flavorful caramel composition, wherein said heat treatment is conducted at a temperature of at least about 150°C;

applying said flavorful composition to a tobacco material[leaf or cut filler made thereof];  
and

preparing a smoking article comprising said tobacco material[leaf or cut filler].

2. (Amended) The method of Claim 1, wherein said hydroxide [mixture consists essentially of a reducing sugar and] is a hydroxide of an alkali metal.

4. (Amended) The method of Claim 1, wherein said reducing sugar is a pure reducing sugar selected from the group consisting of glucose, fructose, sucrose, mannose, galactose, rhamnose, and mixtures thereof.

9. (Amended) The method of Claim 1, wherein said flavorful composition is applied at an amount of from about 5% to about 8% by weight based on the total dry weight of the tobacco material[leaf or cut filler] in the smoking article.

10. (Twice amended) A method for improving the flavor and aroma characters of a smoking article, said method comprising:

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providing a mixture consisting essentially of high fructose corn syrup and sodium hydroxide;

subjecting said mixture to heat treatment for a time and under conditions sufficient to produce a flavorful composition, wherein said heat treatment is conducted at a temperature of at least about 150°C;

applying said flavorful composition directly to a tobacco material [selected from the group consisting of tobacco leaves and cut fillers made thereof]; and

preparing a smoking article comprising said tobacco material.

15. (Twice amended) A method for improving the flavor and aroma characters of a smoking article comprising:

providing a mixture consisting essentially of a reducing sugar and a hydroxide of an alkali metal, wherein the reducing sugar is selected from the group consisting of a pure reducing sugar, high fructose corn syrup, and a phosphate-substituted reducing sugar;

subjecting said mixture to heat treatment for a time and under conditions sufficient to produce a flavorful caramel composition, wherein said heat treatment is conducted at a temperature of at least about 150°C;

applying said flavorful composition to a tobacco material[leaf or cut filler made thereof];  
and

preparing a smoking article comprising said tobacco material[leaf or cut filler].

17. (Amended) The method of Claim 15, wherein said reducing sugar is a pure reducing sugar selected from the group consisting of glucose, fructose, sucrose, mannose, galactose, rhamnose, and mixtures thereof.